

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-17 (Canceled).

Claim 18 (Currently Amended): A method of manufacturing a semiconductor device, comprising:

forming an insulating film on a semiconductor substrate;

forming a conductive film on the insulating film;

forming a nitrogen-containing oxide film ~~over~~ directly adjacent to the conductive film and over the semiconductor substrate[, and the insulating film, ~~and the conductive film~~;

forming a boron-doped phosphorus silicate glass (BPSG) film ~~after~~ over the nitrogen-containing oxide film; and

carrying out a heat treatment on the BPSG film in an oxidizing atmosphere.

Claim 19 (Previously Presented): The method of claim 18, wherein forming a nitrogen-containing oxide film includes carrying out a heat treatment in a dinitrogen monoxide (N₂O) gas.

Claim 20 (Previously Presented): The method of claim 18, wherein forming a nitrogen-containing oxide film includes:

forming a thermal oxide film on exposed surfaces of the semiconductor substrate and conductive film; and

heat-treating the thermal oxide film in a dinitrogen monoxide (N₂O) gas or a nitric monoxide (NO) gas.

Claim 21 (Previously Presented): The method of claim 18, wherein forming a nitrogen-containing oxide film includes:

forming a silicon oxide film on exposed surfaces of the semiconductor substrate, insulating film, and conductive film; and

heat-treating the silicon oxide film in a dinitrogen monoxide (N_2O) gas or a nitric monoxide (NO) gas.

Claim 22 (Original): The method of claim 18, wherein the oxidizing atmosphere contains water vapor.

Claim 23 (Previously Presented): A semiconductor device manufactured by the method of Claim 18.

Claim 24 (Previously Presented): A method of manufacturing a semiconductor device, comprising forming an insulating film on a semiconductor substrate;

forming a conductive film on the insulating film;

forming a nitrogen-containing oxide film in the absence of hydrogen over the semiconductor substrate, the insulating film, and the conductive film;

forming a boron-doped phosphorus silicate glass (BPSG) film after the nitrogen-containing oxide film; and

carrying out a heat treatment on the BPSG film in an oxidizing atmosphere.

Claim 25 (Previously Presented): The method of claim 24, wherein forming a nitrogen-containing oxide film includes carrying out a heat treatment in a dinitrogen monoxide (N_2O) gas.

Claim 26 (Previously Presented): The method of claim 24, wherein forming a nitrogen-containing oxide film includes:

forming a thermal oxide film on exposed surfaces of the semiconductor substrate and conductive film; and

heat-treating the thermal oxide film in a dinitrogen monoxide (N_2O) gas or a nitric monoxide (NO) gas.

Claim 27 (Previously Presented): The method of claim 24, wherein forming a nitrogen-containing oxide film includes:

forming a silicon oxide film on exposed surfaces of the semiconductor substrate, insulating film, and conductive film; and

heat-treating the silicon oxide film in a dinitrogen monoxide (N_2O) gas or a nitric monoxide (NO) gas.

Claim 28 (Previously Presented): The method of claim 24, wherein the oxidizing atmosphere contains water vapor.

Claim 29 (Previously Presented): A semiconductor device manufactured by the method of Claim 24.

Claim 30 (New): The method of Claim 18, wherein the conductive film comprises two layers.

Claim 31 (New): The method of Claim 30, wherein the conductive film comprises a layer of at least one of polysilicon or polycrystalline silicon, and a layer comprising at least one of refractory metal or silicide of a refractory metal.

BASIS FOR THE AMENDMENT

Claims 18-31 are active in the present application. Independent Claim 18 has been amended to require that the nitrogen-containing oxide film is formed directly adjacent to the conductive film. Support for the amendment is found in the paragraph bridging pages 9 and 10 and Figure 8. Claims 30 and 31 are new claims. Support for new Claims 30 and 31 is found on page 10, lines 1-4. No new matter is added.